# Water Conservation Plan Gilbert Springs Well PW-1 Belmont, New Hampshire

### **December 28, 2009**

#### Introduction

This is a water conservation plan for a bulk water production facility to be operated by Mr. Laurent Gilbert on property he owns in Belmont, New Hampshire. Mr. Gilbert has submitted to the New Hampshire Department of Environmental Services (NHDES) an application for a groundwater source of bottled water under the requirements of Env-Dw 303. One requirement of this regulation set is that a water conservation plan be prepared as specified in Env-Wq 2100, and submitted to NHDES.

## **Description of Water Use**

Mr Gilbert has constructed a bedrock well on a site he owns about 2,000 feet southwest of the junction of Shaker Road with South Road in Belmont (Figure 1). The wellbore is six inches in diameter. It is cased with steel casing to a depth of 20 feet, and is 700 feet deep. The main water-bearing fractures are at a depth of 541 to 546 feet. Mr. Gilbert is seeking a permitted withdrawal rate of 56,160 gallons per day (gpd) for the well.

Site facilities currently include the well and an adjacent small (8' x 8') pumphouse (Figure 2). Mr. Gilbert plans to install storage at the site (the amount has not yet been determined), and a loadout facility where tank trucks can load bulk water. Current plans do not call for bottling to be done at the site.

Mr. Gilbert's project falls under the requirements of Env-Wq 2101.08 of the water conservation regulations, which cover industrial, commercial, and institutional water users. Env-Wq 2101.08(a) requires water users to identify the location and amount of water used for existing and anticipated future uses of water associated with six listed categories. There are no existing water uses. Regarding anticipated futures uses, the locations and amounts of water used for the six categories are as follows:

Heating - none;

Cooling - none;

Processing - none;

Product ingredient - as much as 56,160 gpd will be pumped from the well and loaded into tankers, for trucking to offsite bottling facilities;

Sanitary use - none;

Outdoor water use - none.

### **Water Conservation Measures**

The following measures will be taken to conserve water.

<u>Documentation</u> - A water conservation file will be established, and maintained at Mr. Gilbert's home, in which any actions relating to compliance with the water conservation rules will be documented. Generally, the documentation will consist of brief memos including a description of any actions or events, the date of occurrence, and involved personnel. Maintenance of the file will allow compliance with the water conservation rules to be demonstrated.

<u>Source water meter</u> - A calibrated water meter will be installed in the pumphouse. Totalizer readings will be recorded on a daily basis in a log book kept at the pumphouse.

<u>Load out water meter</u> - A calibrated water meter will be installed at the loadout point to measure the amount of water loaded onto tankers. Totalizer readings will be recorded before and after each tanker is filled in a loadout log book. On a weekly basis, readings from the two meters will be compared, and a notation will be made in files maintained by Mr. Gilbert showing when the comparison was made and the person who made it.

<u>Leak detection</u> - If comparison of the meter records indicates that water is being lost between the two meters ("unaccounted-for water" as defined in Env-Wq 2101.03(o)), a leak detection survey will be carried out between the well and the loadout point. Any detected leaks will be repaired as quickly as possible. Whenever an initial observation of unaccounted-for water is made, a leak detection survey is carried out, or a leak is repaired, these activities will be documented with a brief note to the water conservation file. The note will describe the activity, what was done, when it was done, and who was involved.

Overfill preventers - Valves and hoses used to fill tank trucks will be equipped with automatic shutoffs to prevent overfilling and spills during loading of tank trucks.

Mr. Gilbert agrees to abide by the requirements of Env-Wq 2101.08(b)governing installation and maintenance of water meters.

The requirements of Env-Wq 2101.08(c) through Env-Wq 2101.08(i) apply to processes that will not exist at Mr. Gilbert's facility, and therefore are not applicable.

Env-Wq 2101.08(j) applies to lawns. Mr. Gilbert's facility will not have a lawn or other landscaping involving water use.

## Public Notification and Involvement (Env-Wq 2101.11)

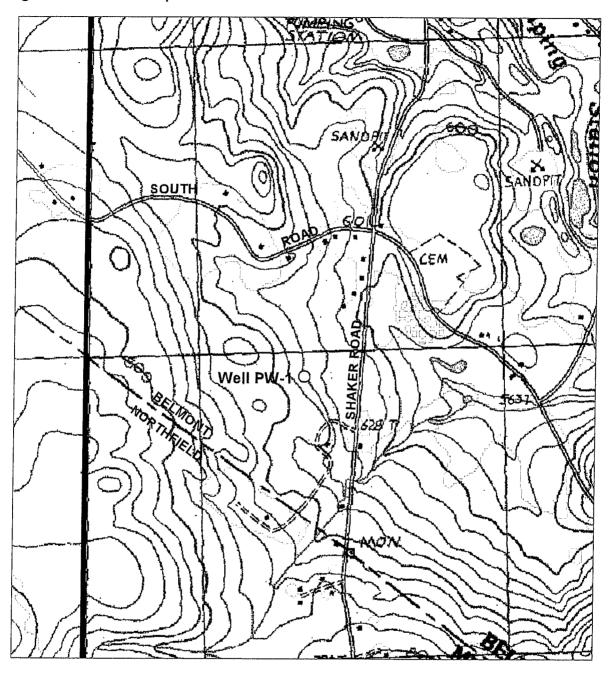
In compliance with the requirements of Env-Wq 2101.11, a package including this plan is being submitted to the Belmont Board of Selectmen and the Lakes Region Planning Commission. The package will also contain a summary of the requirements of

Env-Wq 2101, a request that site planning requirements be amended to reflect the requirements of Env-Wq 2101 when applicable, and a request that site planning requirements be amended to promote water conservation landscaping for new projects. Package recipients will be informed of their right to provide written comments on the water conservation plan within 21 days of receiving the document.

# On-Going Compliance with Water Conservation Rules (Env-Wq 2101.13)

Mr. Gilbert will submit the information required every three years under the requirements of Env-Wq 2101.13.

Figure 1 - Location Map





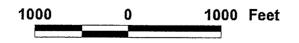
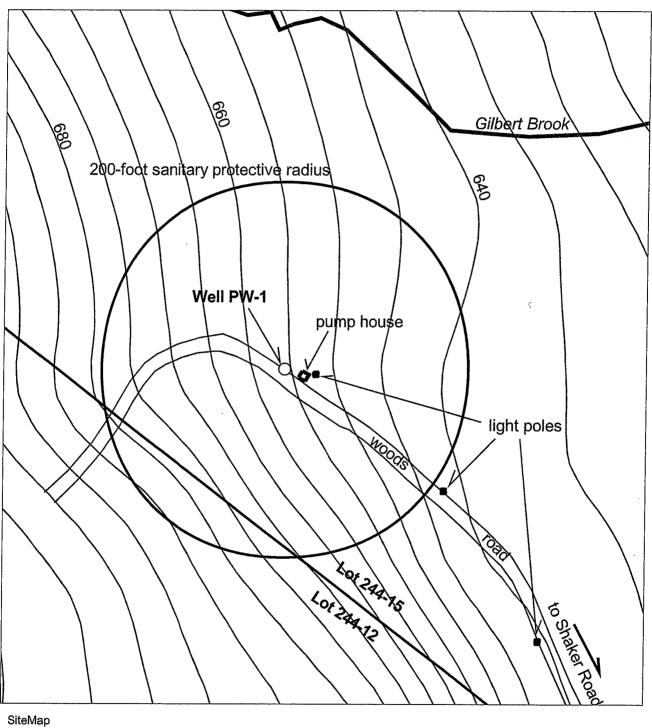




Figure 2 - Site Map

Topographic contours (in feet) generated from digital elevation model.



100 0 100 Feet



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